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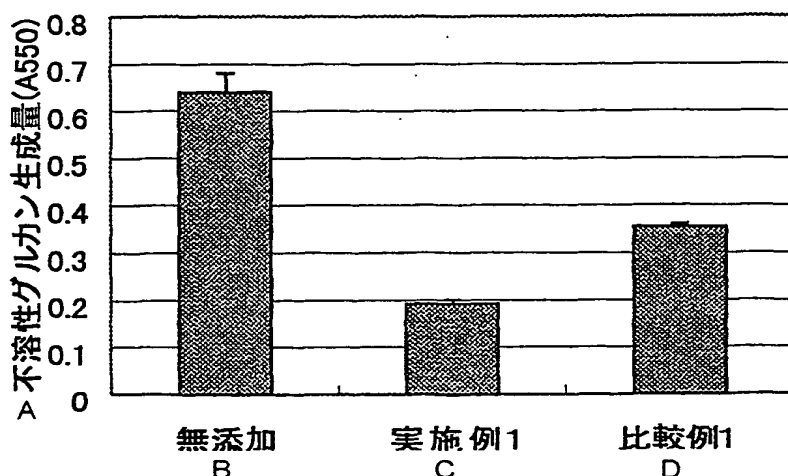
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- (51) 国際特許分類<sup>7</sup>: C07G 17/00 県 守谷市 緑 1 丁目 1 番 2 1 号 アサヒビール株式会社 未来技術研究所内 Ibaraki (JP). 神田 智正 (KANDA, Tomomasa) [JP/JP]; 〒302-0106 茨城県 守谷市 緑 1 丁目 1 番 2 1 号 アサヒビール株式会社 未来技術研究所内 Ibaraki (JP).
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- (72) 発明者; および 2 文字コード及び他の略語については、定期発行される各 PCT ガゼットの巻頭に掲載されている「コードと略語のガイダンスノート」を参照。
- (75) 発明者/出願人 (米国についてのみ): 田頭 素行 (TAGASHIRA, Motoyuki) [JP/JP]; 〒302-0106 茨城

(54) Title: PROCESS FOR PRODUCING HOP GLUME POLYPHENOL

(54) 発明の名称: ホップ苞ポリフェノールの製造方法



A...YIELD OF INSOLUBLE GLUCAN (A550)  
B...NO ADDITION  
C...EXAMPLE 1  
D...COMPARATIVE EXAMPLE 1

(57) Abstract: It is intended to provide a process for efficiently producing highly purified hop glume polyphenol using hop glume as the starting material, and foods, drinks, cosmetics and drugs with the use of the highly purified hop glume polyphenol. Namely, a process for producing hop polyphenol which comprises extracting hop glume with an aqueous alcohol solution, concentrating the extract to give a residual alcohol concentration of 0.5 to 2% and then centrifuging and/or filtering the concentrate. This polyphenol is usable in foods, drinks, cosmetics, drugs, etc.

(57) 要約: ホップ苞を原料とし、効率良く、かつ精製度の高いホップ苞ポリフェノールを製造する方法、およびその精製度の高いホップ苞ポリフェノールを用いた飲食品、化粧品、医薬品を提供する。ホップ苞をアルコール水溶液にて抽出したのち、その抽出液を、残存アルコール

濃度0.5~2%まで濃縮し、遠心分離および/またはろ過工程を施すことによりホップ苞ポリフェノールを製造する方法である。該ポリフェノールは飲食品、化粧品、医薬品等へ利用することができる。

WO 2004/052898 A1

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/15959

## A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl<sup>7</sup> C07G17/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
Int.Cl<sup>7</sup> C07G17/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
CAPLUS/MEDLINE/BIOSIS/WPIDS (SNT)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 9-2917 A (Asahi Breweries, Ltd.), 07 January, 1997 (07.01.97), Claims; Par. Nos. [0011], [0033]; example 1 (Family: none)	1-5
Y	JP 9-295944 A (Asahi Breweries, Ltd.), 18 November, 1997 (18.11.97), Claims; Par. Nos. [0009], [0014]; examples 2, 7 to 18 (Family: none)	1-5
Y	JP 2001-39886 A (Asahi Breweries, Ltd.), 13 February, 2001 (13.02.01), Claims; examples 2, 9 (Family: none)	1-5

☒ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier document but published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

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International application No.

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 2000-327582 A (Asahi Breweries, Ltd.), 28 November, 2000 (28.11.00), Claims; examples 2, 4 12 (Family: none)	1-5
Y	JP 9-224606 A (Meiji Seika Kaisha, Ltd.), 02 September, 1997 (02.09.97), Par. No. [0014]; example 1 (Family: none)	1-5